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ABSTRACT

This publication describes arena and modular scheduling programs developed as a cooperative effort of two Pennsylvania high schools. Included are descriptions of the procedure used by Marian High School in its transition to modular scheduling and the procedures and materials used by Tamaqua Area High School in its arena scheduling system. Much of the publication consists of an appendix that presents sample materials, forms, and timelines for Tamaqua High School's arena scheduling system. (JG)

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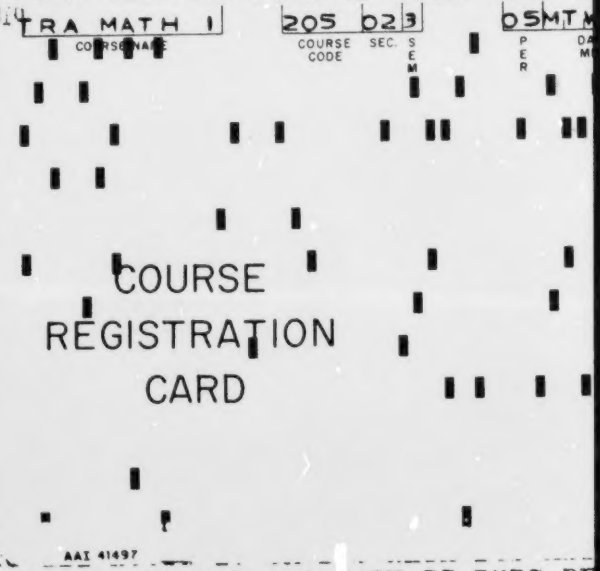

MODULAR SCHEDULING
ARENA SCHEDULING

TAMAQUA AREA HIGH SCHOOL
MARIAN HIGH SCHOOL

Title 4C
Project # 76-75433C

ACKNOWLEDGEMENTS

ESEA - TITLE 4C
Project #76-75433C
Systems Approach to Curriculum
A
Cooperative Project

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"A Flexible Scheduling Approach"

TAMAQUA AREA HIGH SCHOOL

Tamaqua, Pa.

PREFACE

The following materials on arena and modular scheduling are a cooperative effort between Marian High School and Tamaqua Area High School under a Title IV-C Federal Project "Systems Approach to Curriculum".

This booklet contains the documentation of the procedure used by Marian High in its transition to modular scheduling and Tamaqua Area's utilization of the arena to facilitate the elective system developes in its curricular revampment.

It is hoped that this publication can serve as a resource for other schools contemplating adoption of either the arena or modular approach to scheduling.

CONTENT

1. Background

2. Scope of Program

3. The Arena Process

4. Evaluation

BACKGROUND

Arena scheduling would be a nebulous term without some insight as to what had occurred to cause Tamaqua Area High School to develop such a scheduling system and how the arena system will correct the inefficiencies of the existing eight track scheduling system.

Our search for an alternative student scheduling system, started in 1971, resulted from an evaluative report from the Middle States Association of College and Secondary Schools. This report indicated that the range and number of subject offerings in our curriculum constituted a real strength for the school. However, the existing eight curricular track system was too restrictive because students did not have the opportunity to select courses from the broad spectrum of offerings which would meet their needs.

Various study committees were organized to investigate what changes within the eight track system would be required in order to implement these recommendations. A "Curriculum Committee" composed of students, faculty and administrators was organized. This committee recommended that the 8-track system be reduced to 4-tracks by combining tracks and requirements and designated Academic, Business, Vocational and General. But, regardless of what was done, student flexibility would always be limited until new curricular requirements would be approved.

The "Guidance Committee" reported that many scheduling conflicts arose when students attempted to select courses in a second track. Consequently, the administration was forced to substitute available courses in lieu of what the student had originally selected. This often caused the student to be placed in courses not of his selection.

A review of Pennsylvania State requirements revealed that several alternatives were possible. After study it was decided that traditional senior math and senior science courses would no longer be required. Secondly, the senior social studies program was changed from a year of Problems of Democracy to a required semester of Economics and the election of two of four nine-week social studies courses. For the first time senior students could select courses of their choice to a limited degree.

Another change which occurred at this time was the conversion of the Language Arts courses to three-week mini-courses. This change was brought about due to the fact that Vocational students were on a three-week-about program and were totally segregated from the remainder of the student body in their course selection. This conversion was overwhelmingly approved by the student body. The positive attitude on the part of the students, along with the limited choice of a few electives made it apparent that additional options had to be offered to the student body. This resulted in the District developing an ESEA Title III project entitled "Communicating Arts Curriculum"(CAC), which was designed to provide students with an opportunity to pursue course work in the fine and practical arts areas. The CAC program dramatically increased the number of course options available to students, but was restricted to the arts area.

These mounting changes began to offer many alternatives to students at the senior level but created a complexity in the manual scheduling process that led the committee to think in terms of computerized scheduling. It was apparent that a new scheduling system should be adopted which would provide students with greater flexibility.

After studying the scheduling needs of our school, the school administration decided to use the services of Pentamation Corporation, a computer scheduling corporation affiliated with F & M College at Lancaster, Pa. The scheduling program which was initiated proved to be inadequate since many student conflicts still existed and had to be corrected by administrative decision rather than student choice.

A search of resource centers such as RISE, ERIC, and IDEA was initiated to determine individualized scheduling approaches used by other school districts. Of those scheduling approaches identified none seemed to meet the needs of our district. During evaluation of our ESEA Title III CAC program, we became aware of a school district in Northeastern Pennsylvania that had developed a computerized system of scheduling based on semester courses. A visit to Shickellamy School District provided us with the information needed to proceed with a semester course approach to scheduling. This would provide students with not only an opportunity to select a variety of courses to meet their needs but also the

opportunity to create their own individual program. The proposed system greatly appealed to the administration since the centralized Vocational-Technical School which serviced our district was contemplating that their educational program would be based on semester-about system for students.

An explanation of the new scheduling was presented to the Tamaqua Area High School staff at an in-service meeting. Recommendations for implementing these programs were received from the staff and reviewed by the Curriculum Committee. This review included the examination of the 4-week modular courses used in the Language Arts Department, and the 9-week modules developed by the Social Studies Departement. After study the staff decided that the development of all new courses except Language Arts would be for a 9 or 18 week module. To implement these changes would necessitate almost a total reorganization and restructuring of the curriculum, reidentification of course credit value, revision of graduation requirements and the identification of courses for various areas needed for career planning.

After dialogue with Pentamation personnel, parameters were established for program implementation and an agreement was reached that the available computer services could be utilized.

During the early Fall the Arena Scheduling Committee was organized which consisted of faculty members from grades 9 thru 12, a Guidance Counselor and the Principal. The Principal presented to the Committee the philosophy of the individual scheduling and sample materials from Pentamation which could possibly be used in the arena process. Several basic committee functions were determined. The Committee would establish a time date line and define the procedure and process by which the Arena would function. The Principal was assigned liaison duty with the computer personnel to facilitate the integration of necessary programming into the time date line. The final time date-line established is presented in Appendix A, Chart 1.

SCOPE OF PROGRAM

During the last week of January students received a memorandum from the Principal's Office with instructions for Individualized Registration and Arena Scheduling Procedures. (see Appendix A, Sample 1)

Early in February students were issued a Curricula Booklet and a Preliminary Registration Sheet (PRS). (See Appendix A, Samples 2,3). Each student completed the PRS within two weeks and returned it to the homeroom teacher.

When materials were distributed, time was allotted in homerooms for teachers to review the cover sheet and PRS, to emphasize due date for completed PRS, to review procedure for completing the PRS, to review at least one course description so each student would be familiar with structure and to encourage students to look for alternate courses in the event a course(s) would be dropped.

If the scheduling process was to be successful, students, parents, and faculty had to be knowledgeable of the scheduling procedure. Thus the following was recommended:

1. In-school announcements - closed circuit TV if possible
2. In-school teacher-student counseling periods
3. Teachers incorporate some counseling with students within their daily classes
4. Up-date memoranda distributed periodically
5. Evening orientation program for parents, faculty, students
6. Principal-Teacher counseling

After all PRS tally sheets had been returned to the homeroom teacher they were checked for proper completion, making sure the students had selected the curriculum mandated requirements by both the Pennsylvania Departement of Education and the Tamaqua Area School District.

By the end of February and after all PRS tally sheets had been thoroughly checked, they were returned to the students along with a Computer Scan Sheet. (See Appendix A, Sample 4). The students then copied by course number their selections onto the Computer Scan Sheet. The teacher retained the PRS tally sheet and forwarded the Computer Scan Sheets to the Principal's Office. Subsequently, the Scan Sheets were forwarded to Pantamation Corporation which tallied the number of students for each specific course.

From the computerized information the Principal developed a list of dropped and closed courses. The standard minimum number of students required to offer a course was 15. Courses closed when filled to District's determined capacity. A prepared Dropped Course List, student's PRS tally sheet (retained by teacher), and a second Scan Sheet were returned to the student.

Those students who had selected a dropped course then selected an alternate course from the tally sheet but not a course offering that was closed. The students then completed a second Scan Sheet which contained those courses unaffected by the drop-add and those courses chosen as alternates for the drop courses.

All Scan Sheets were collected by the homeroom teacher, sent to the Principal's Office and forwarded to the Computer Center to determine the final course offerings and exact student enrollment in each course.

From the results of the above computerized findings, the Principal constructed a Master Schedule, which identified course code, number of classes for each course designated as sections, course title, instructor, quarter or semester period and days of instruction.

This information was returned to the computer center which produced the materials necessary for use in the Arena Scheduling Process. These materials included individual student Course Request sheets, a predesignated number of Computer Course Registration Cards for each section of every course being offered and a Computer Identification Card for each student. (See Appendix A, Samples 5, 6, and 7.)

By early April a Master Schedule and Instructions for Final Individualized Registration were prepared and distributed to the students. (See Appendix A, Samples 8 and 9). From that information the students constructed their own tentative class schedules. During the intervening weeks, while students were preparing their tentative class schedules, planned orientation sessions were conducted by the Principal and other members of the Arena Scheduling Committee. Using class time and extended homeroom periods students were assisted in preparing two tentative class schedules. The first schedule listed the preferred instructor, period and quarter for each selected course. The alternate class schedule identified a different ordering of instructor, periods and quarters to be used in case of conflicts. Also, the Principal and other committee members were available after school hours and on one evening for counseling students and parents.

The Arena Scheduling Process began the third week in May. Using a month-of-birth lottery, the Senior Class Officers drew the order by which students were called to the Arena. The results of the lottery were announced to the students and the birth month order was used by all classes. The order in the Arena was Juniors, Sophomores and Freshmen. The only exception to the procedure concerned Vocational Technical students who, at the time of scheduling, were attending the Vo-Tech School. These students were retained at the home school and scheduled first in their proper class order. All other students were called from classes via the public address system according to the established birth month order.

With an enrollment of 750 students in grade 9 thru 11, using seven 45-minute periods, excluding lunch, we anticipated the scheduling would be completed in five school days. The fifth day was designated as a make-up day for absentees and students with schedule conflicts.

THE ARENA PROCESS

The Arena Area consists of two sections: an ORIENTATION SECTION and a SCHEDULING SECTION.

The ORIENTATION AREA contains a Master Board identifying the department headings, ie. Language Arts, Science, Social Studies, etc. This Board is for the purpose of listing closed class sections for the students. As a class section is closed, the course code number and title along with the period and quarter that the course is being offered is posted on the Master Board.

The SCHEDULING AREA must be large enough to house a guidance resource center, a check-out desk, and enough tables to contain the computer course cards for each of the departmental areas. Each of the departmental tables are staffed by at least one person from within that department. The tables are: Social Studies, Language Arts, Mathematics, Science, Business Education, Health and Physical Education, Driver Education and Industrial Arts, Home Economics and Music, and Modern Foreign Language and Art, and Guidance. (See Appendix A, Diagram 1)

On the first designated day of the Arena, the first birth month of junior students, as determined by the lottery are called to the ORIENTATION AREA of the Arena. At this location the Principal reviews the operation of the Arena and the functions of the master board. The Guidance Counselor, and the staff representative at the departmental tables, the Principal also checks the Student's Request Course Form for birth date, reviews preferred and alternate class schedules, and issues each student an Identification Card. (see Appendix A, Sample 7)

The student then proceeds to the various departmental tables in the SCHEDULING AREA and asks for cards (see Appendix A, Sample 6) for those courses he has listed on his Student Course Request Form. The Course Cards are coded with a section number to coincide with the quarter and period requested by the student on the preferred or alternate schedule. The student is free to contact the staff member at the departmental tables in any order that the student desires. Anytime a student receives a Course Card, the attending departmental staff member places his or her initials next to the course title or course number on the student request form to validate a card was received.

After securing all course cards, the student proceeds to the check-out desk, where he receives a computer schedule card for lunch assignment. The student is now ready to have his schedule cards verified at the check-out desk. The cards are verified by checking the cards which the student has picked up against the initialed request form. The student identification card is then placed on top of the packet of schedule cards. If the student card packet is accurate, he has completed his scheduling and the schedule cards will be filed for computer processing. If any card does not correspond to the courses listed on the student request form, the student is sent to the appropriate departmental table.

If any conflict(s) develops in the scheduling process which cannot be resolved by the student and staff member at the departmental table, the student reports to the Guidance table for assistance. If the conflict is irresolvable, the student receives from the Counselor a drop-add slip which indicates the necessary changes for the student to be scheduled. (See Appendix A-Sample 10) The student then proceeds to the check-out desk where his packet of cards, along with drop-add slip, the Student Request Form, and the Student Identification Card are held for additional scheduling on the make-up day.

On the make-up day, the students with conflicts and students who were absent on their original scheduling date are called to the Arena. The same class order but reverse lottery order is used - those who were scheduled last would have the greatest possibility of conflict. When the student returns to the orientation area, he brings with him the original alternate and preferred schedules. The Principal distributes card packets and explains that conflicts may be resolved by substituting courses in open sections, by dropping the course in conflict, or by the departmental staff member opening a closed class section as a final resort. The student now procedes through the Arena to resolve the conflicts.

Any student who does not complete the scheduling process is scheduled by the Guidance Department according to available courses and sections.

EVALUATION

At the conclusion of the Arena Scheduling Process, the Arena Committee requested that students and faculty share their views of the process and make recommendations for improvement. During the summer of 1976, the Arena Committee met to discuss the recommendations. It should again be stated that this scheduling procedure was developed to facilitate the curricular changes which rendered the former scheduling procedure inadequate.

Having now had the opportunity to review the operation of the Arena Scheduling Process, we have concluded that the procedure satisfied our original purposes and enabled us to solve what we viewed as our scheduling needs. Seven hundred eleven students were scheduled without conflicts, 60 students were partially scheduled and only one student had an irresolvable conflict.

The curriculum changes moved us from a 4-track curriculum to a listing of over 200 courses. This change allowed students to explore a wide variety of courses in all curricular areas and to elect courses on a need or interest basis or in line with particular career goals.

Since courses were designed for 9 or 18 week segments, students in scholastic difficulty were, for the first time, no longer required to remain in a failing situation for a full school year.

In line with the semester-about program established by the Vocational Technical School, those students could now be readily integrated into courses with home school students. Vo-Tech students now were not made to feel that they were a separate group in the home school situation.

In addition the greater variety of course selections has tended to reduce individual class size which has met with faculty approval. Furthermore, in many instances, it has allowed multiple class sections to achieve a better balance of the number of students per section. Also students have an opportunity to use what was free time or study hall time to elect additional courses beyond the school requirements. In many situations students could now select teachers as well as courses, thus, possibly eliminating a number of personality clashes.

Another plus factor was the opportunity for the staff, on a volunteer basis to assist pupils with Individualized Programmed Instruction (IPI). This we found to be an alternative for students who had conflicts and desired to pursue course work on an IPI basis.

Finally, since the traditional lock-step approach to curriculum had been eliminated, we anticipated greater parental involvement in the course selection and career planning process. However, this did not materialize to the degree anticipated. Further investigation as to why this did not happen is needed and perhaps additional avenues of communication have to be explored.

We do not intend to imply that the Arena is a utopia for scheduling. The Arena has created problems, some anticipated, and others unforeseen. Some of the problems are:

- using school time for scheduling creates class interruption and the need for class coverage for those departmental members working in the Arena;
- getting approximately 50 staff members to understand the program, to distribute, explain, review and collect materials at the times designated, students receive conflicting information regarding the scheduling process;
- holding the student accountable for course request selections on the PRS and transferring this information accurately to the first scan sheet;
- dropping courses previously requested can create course offerings with less than the minimum required number of students because students do not adhere to their course committments and request course changes increasing the duties of clerical personnel;
- rescheduling mandated courses or substituting electives for students who have failed after the Arena Scheduling Process is completed;
- changing courses requires additional guidance services creates inaccuracies in class lists, and causes classes of larger size than desired.

It is obvious that the weaknesses deal primarily with the adopted procedures rather than the Arena Scheduling Process. Consequently continued study, up-dating, and revision by a committee of student, staff and administration is necessary.

APPENDIX

A

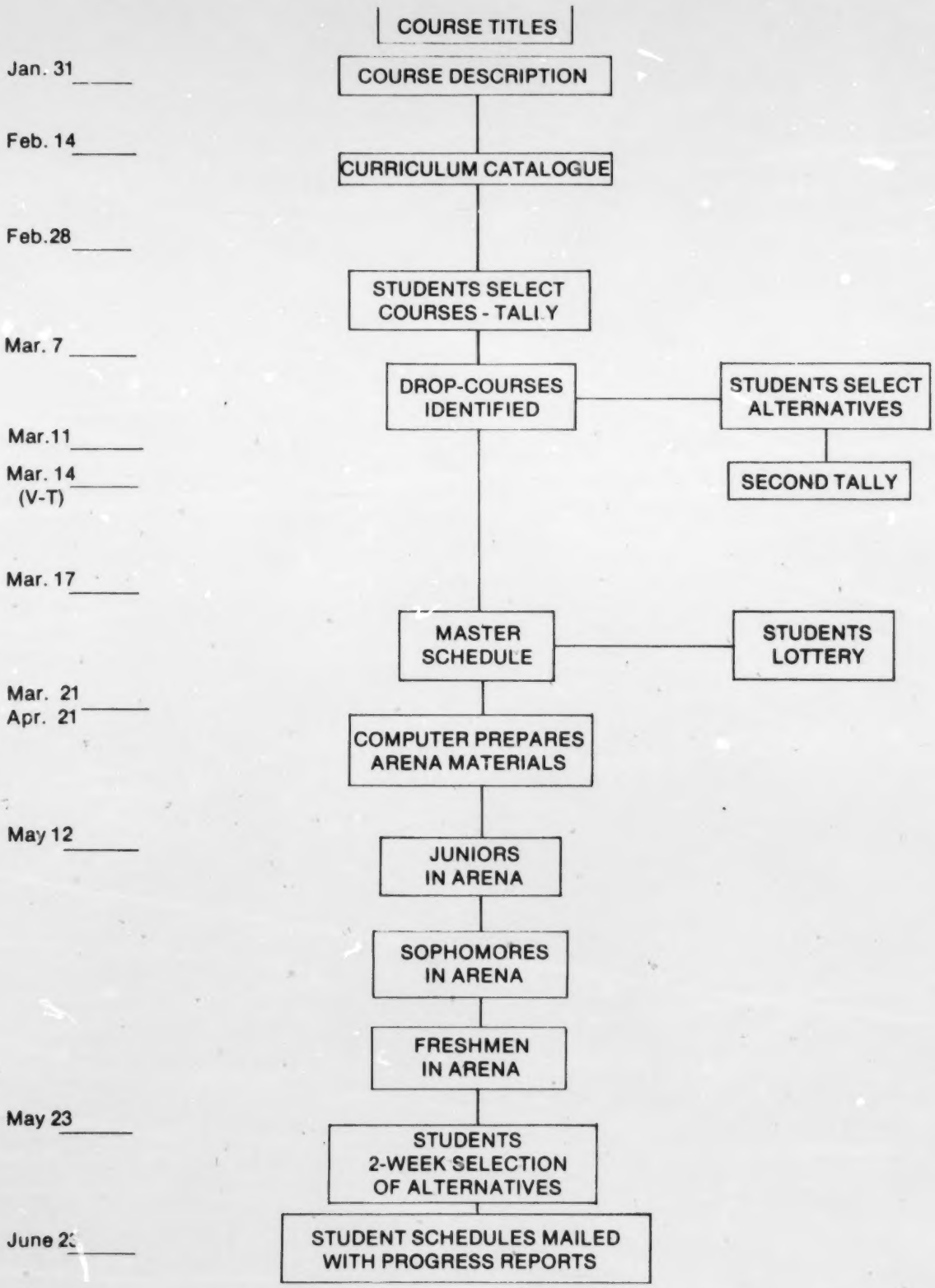
COURSE TITLES
Jan. 31
COURSE DESCRIPTION
Feb. 14
CURRICULUM CATALOGUE
Feb.28
STUDENTS SELECT COURSES - TALLY
Mar. 7
DROP-COURSES IDENTIFIED
STUDENTS SELECT ALTERNATIVES
Mar.11
Mar. 14 (V-T)
SECOND TALLY
Mar. 17
MASTER SCHEDULE
STUDENTS LOTTERY
Mar. 21
Apr. 21
COMPUTER PREPARES ARENA MATERIALS
May 12
JUNIORS IN ARENA
SOPHOMORES IN ARENA
FRESHMEN IN ARENA
May 23
STUDENTS 2-WEEK SELECTION OF ALTERNATIVES
June 2
STUDENT SCHEDULES MAILED WITH PROGRESS REPORTS

CHART 1

TIME LINE FOR ARENA SCHEDULING

I. COURSE TITLES — JANUARY 31
   1. COMPLETED

II. COURSE DESCRIPTIONS — FEBRUARY 14
   1. COMPLETE
   2. WORK BEING COMPLETE
      A. STUDENT COURSE INFORMATION
      B. GUIDE-BOOKLET

III. CURRICULUM INFORMATION TO STUDENT — FEBRUARY 28
   1. ALL STUDENTS (ALSO V-T) DISTRIBUTION OF MATERIALS (WATCH ABSENTEES)
   2. TEACHER SHOULD:
      A. REVIEW COVER SHEET
      B. STATE DATE MATERIALS DUE BACK
      C. REVIEW AT LEAST ONE COURSE DESCRIPTION SO STUDENT IS FAMILIAR WITH STRUCTURE.
      D. REVIEW PROCEDURE FOR COMPLETING PRELIMINARY REGISTRATION FORM (PRS)
      E. ENCOURAGE STUDENTS TO LOOK TO ALTERNATIVE COURSES IN THE EVENT A COURSE IS DROPPED.
      F. CHECK WITH STUDENTS FOR RETURN
      G. CHECK OFF MATERIALS AS STUDENT RETURNS
      H. TURN "PRS" INTO OFFICE DAILY.

IV. MATERIALS RETURNED FROM STUDENTS (HOME SCHOOL) — MARCH 7
   1. OFFICE MAKES FIRST TALLY

V. MATERIALS RETURNED FROM ROTATING (V-T) — MARCH 11

VI. DROP-ADD LISTS TO STUDENT (8:30 a.m.) — MARCH 14
   1. ALL STUDENTS
   2. LIST OF DROP COURSES SUPPLIED
   3. FIRST TALLY RETURNED TO STUDENTS
      A. COPY THEIR DROP COURSES
      B. GIVEN A **SECOND** TALLY SHEET
      C. COLLECT FIRST TALLY & RETURN TO OFFICE

VII. DROP-ADDS RETURNED — MARCH 17
   1. STUDENT GIVEN COMPUTER ELECTIVE SHEET
   2. WITH A #2 PENCIL
      A. STUDENTS TRANSFER ELECTIVES
      B. COMPLETES IDENTIFYING INFORMATION
         1. YOU SHOULD HAVE STUDENT #'s
   3. COLLECT COMPUTER SCAN SHEETS AND FORWARD TO OFFICE
      A. WATCH ABSENTEES - CHECK OFF PROCEDURE

VIII. BUILD MASTER SCHEDULE — MARCH 21
   1. INTERACTION WITH DEPARTMENTS

IX. MASTER SCHEDULE TO COMPUTER — APRIL 21
   1. LOTTERY
   2. SCHEDULING INFORMATION TO STUDENTS (TEACHER EXPLAINS COURSE PRINT OUT)
   3. STUDENTS WORK ON SCHEDULES - TEACHER CHECKS PERIODICALLY
   4. PRIORITY SELECTION EXPLAINED
   5. SCHEDULE LUNCH

X. ARENA SCHEDULING BEGINS — MAY 12
   1. PERSONNEL REQUIRED
      A. DEPARTMENT CHAIRMAN
      B. NON-DEPARTMENT PERSONNEL
         1. AIDES-SECRETARY
      C. GUIDANCE COUNSELOR(S)
      D. STUDENTS
   2. LOCATION - GYM
   3. TIME-PERIOD 1-2-3-4-9-10

4. ADJUSTMENTS IN TEACHING SCHEDULE
   A. WITHIN DEPARTMENTS
   B. SHARING
   C. DOUBLING
5. IN THE ARENA - STUDENTS
   A. REPORTS TO CHECK-IN DESK
   B. PROVISIONAL SCHEDULE CHECKED ALONG WITH COURSE PRINT OUT
   C. GIVEN HEADER CARD
   D. CHECKS SCHEDULE AGAINST MASTER BOARD
   E. BY PRIORITY PICKS UP COMPUTER CARD
      1. G.C. - BIN PERSONNEL RESOURCES
      2. BIN PERSONNEL INITIAL SCHEDULE
   F. REPORTS TO CHECK OUT
      1. CARDS CHECKED AGAINST STUDENT PRINT OUT
      2. GIVEN LUNCH CARD
      3. DISMISSED

XI. SCHEDULING RESULTS TO COMPUTER	MAY 23
XII. SCHEDULES RETURNED	JUNE 9
XIII. SCHEDULES DISTRIBUTED	JUNE 13
XIV. SCHEDULE ADJUSTMENTS	JUNE 16
	JUNE 27

TAMAQUA AREA HIGH SCHOOL
TAMAQUA, PA.

JANUARY

MEMORANDUM 1 PRINCIPAL'S OFFICE

INDIVIDUALIZED REGISTRATION AND ARENA SCHEDULING
FOR GRADES TEN TO TWELVE

Individualized registration is a process wherein the student is responsible for building his own schedule after he has been supplied with the proper information, assistance, and time to make wise decisions about his educational progress in school.

As the first step in the registration procedures, the students in grades 9 through 11 will be given a Curricula Booklet and a Preliminary Registration Sheet early in February. From the course offerings, the student will select the courses that he wishes to take. The homeroom teachers will be responsible for collecting the completed registration forms from the students by February 18.

After all Preliminary Registration Forms have been returned, they will be sent for a tally. This will indicate how many sections are needed for specific courses and those courses to be deleted due to lack of demand. Students who have chosen "dropped" courses will be instructed to select alternate choices. Then a new tally will be run to set exact class and section offerings.

From this final class tally, the Master Schedule which identifies the classes, the teachers, the periods, and the quarters will be built. In addition, student precedence for registration will be established. Previously, students at the beginning of the alphabet have had an advantage over those at the end of the alphabet. This year classes will be determined by lottery. During an assembly period a student will draw for registration position on the basis of birth month. For example, if the first month drawn is June, then all students having a June birth date would register first. Juniors will complete their registration first because of their critical need to complete requirements for graduation and their lack of opportunity to pick up a conflict in a later year. Sophomores and Freshmen will complete registration in succeeding order.

May 10 the actual registration will take place in a simulated "arena" setting. Prior to the day of registration, each student will be given: (1) a data processing student identification card (with birth date), (2) a data processing list of chosen courses, (3) a copy of the entire Master Schedule and (4) a blank schedule sheet. The student will be instructed to work out his schedule preferences before he enters the arena which will probably be the gymnasium.

On the day of registration, the students will be called by grade and month to the gymnasium. Once here, he will find each subject area represented at tables supervised by coordinators, teachers and student aides. Each table will have Data Processing cards for each course offering limited in number to the desired class size. Students course selection cards will be checked by the table supervisors to see that the student had originally requested the course. If he had elected the course, he gets a pre-punched IBM card and has, indeed, registered for that course at that time and with that teacher. If the specific course hour or teacher is unavailable, he must choose another hour or teacher of the course in question. In this manner, the student will progress from one table to another until he has worked out a schedule of teachers and hours for the courses he wants to take. If a conflict should arise between two courses offered at the same time, the student must see the guidance counselor to work out an alternative. For this purpose, the counselors will be located in the center of the arena where they will be readily available. Any changes on the course listing cards will be made and initialed by the counselors.

At the conclusion of the registration process, the student will submit to a central receiving desk: (1) his student identification header card, (2) his stack of collected IBM cards, and (3) his student selection card, and one copy of his prepared, approved schedule. The supervisor of this desk will check to see that he has scheduled his courses in accordance with his course indications. This entire process should take approximately 20 to 30 minutes per group.

This approach to registration should yield a number of advantages. First, students will have greater flexibility of course choice as well as meeting hour. It is expected that there will arise fewer scheduling conflicts and those which do occur will be solved immediately. The involvement of each subject department, along with the assignments of a data processing card to each student who elects a course, should prevent over-crowding of classes. Every student and teacher will know his next year's schedule before the end of this year. With the tremendous increase in course offerings in Tamaqua Area High School, actual scheduling becomes a reality. In essence, students should find much greater freedom to build the kind of program they need for their interests and goals.

TAMAQUA AREA HIGH SCHOOL

The Tamaqua Area High School offers courses of study which are based on each student's career or life goal plans. Believing that all education should aim for one's occupational placement and for the formation of a good and happy life, the Tamaqua District has structured its course selections with great flexibility for individual choice. With this greater freedom of choice comes the possibility for each student to elect into all areas of learning. It also causes the student to consider his career objectives at an earlier time in order that the student selects the proper courses to meet those career objectives. Consequently, planning for education becomes a very closely related task among the student, the parent and the school. We strongly recommend that parents and students work through the selection of courses jointly and if there are questions to contact a teacher or the guidance counselor.

If a student intends to enter college or other institutions of post-high school training, he should elect those subjects which are required for entrance to those institutions. Many colleges require three years of a traditional math sequence, two years of a modern foreign language and a sequence in science. Others do not. Therefore, it is important to investigate colleges and other training institutions in the early years of high school. Several suggested curricular recommendations are included in the packet for your guidance.

All curricular areas have mandated requirements, both by the Pennsylvania Department of Education and the Tamaqua Area School District. These requirements are found elsewhere in the guidelines and should be read and considered first. After considering these requirements you are ready to begin course selection. To do that, each student and his parents should carefully read the course descriptions. They are written to give some direction for student selection. Two critical questions should be answered or at least examined most carefully before any courses are selected:

(1) After considering my own abilities, limitations and interests, what do I want to do after high school?
(2) What do I need to take in high school which will help me accomplish this?

The faculty and staff of TAHS sincerely wish that by these opportunities offered, each student's school life will be more enriched, productive and happier.

Sample 2

Beginning with the 1975-76 school term it was necessary for students to accumulate a minimum of 20 credits to graduate from TAHS, except Vo-Tech students whose MINIMUM is 19. These credits are accumulated from grades 9 through 12. If each parent and student is guided and completes the suggested listed courses under Curriculum Recommendations which follows there should be no problem. There may be and probably are students whose career objectives do not totally fit into any of the three areas. These parents and students should receive special counseling.

SUGGESTED COURSES for students intending to pursue a **COLLEGE CAREER**

Language Arts	8 semesters	4.0 credits
Mathematics	6 semesters	3.0 credits
Science	6 semesters	3.0 credits
Soc. Studies (2 sem AC; 2 sem WC; 1 sem Econ)	7 semesters	3.5 credits
One Modern Foreign Language	4 semesters	2.0 credits
Physical Education & Health		1.6 credits
Home Economics or Industrial Arts		.4 credit
Art		.25 credit
Electives	4½ semesters	2.25 credits
		20.00 credits

Occasionally college students must take an Art or a Music elective, therefore, it may be well that prospective college students elect a course in those areas.

SUGGESTED COURSES for students intending to pursue a **BUSINESS ED. CAREER**

Language Arts	8 semesters	4.0 credits
Soc. Studies (2 sem AC; 2 sem WC; 1 sem. Econ)	7 semesters	3.5 credits
Math & Related Business Math	4 semesters	2.0 credits
Science	4 semesters	2.0 credits
Typing	2 semesters	1.0 credit
Accounting	2 semesters	1.0 credit
Business Related Electives	6 semesters	3.0 credits
Intro to Business/Business Careers		.5 credit
Physical Education & Health		1.6 credits
Home Economics or Industrial Arts		.4 credit
Art		.25 credit
Electives	3 quarters or 1½ semesters	.75 credit
		20.00 credits

Inasmuch as **Vo-Tech** students will be available only on a semester about basis, requirement courses have been kept to a minimum.

Language Arts	3 semesters	1.5 credits
Social Studies (3 semesters: 1 WC 1 Econ; 1 Am.	3 semesters	1.5 credits
Science	2 semesters	1.0 credit
Mathematics	2 semesters	1.0 credit
Physical Education	3 semesters	
Health	1 semester	.8 credit
Vo-Tech	3 semesters	6.0 credits (min)
Electives	6 semesters	3.0 credits
Credits carried from Gr. 9		4.2 credits
		19.00 credits

TAMAQUA AREA HIGH SCHOOL
Tamaqua, Pennsylvania

_____ 1st Tally
_____ 2nd Tally

PRELIMINARY REGISTRATION SHEET **1976-77 SCHOOL TERM**

Name_____ Male _____ Female_____ GRADES('76-77)__ DOB _____ Mo. Day Year

Name THREE CAREERS you are considering:

1._____ 2._____ 3._____

CURRICULUM: (Check 1) COLLEGE PREP_____ BUSINESS_____VO TECH_____

DIRECTIONS: Listed below are the courses to be offered at TAHS. **First**, carefully check the Curriculum Booklet to see what is suggested in your curricular area. **Secondly**, choose the courses you desire by circling the data processing number (DPN). You should select a minimum of 5 **CREDITS** or whole number value (1.0). Be sure you do not select courses for which you **HAVE NOT MET PREREQUISITES**, or have taken previously, even if titled differently. Course prerequisites, if there are any, are stated at the beginning and top of each course description.

IDENTIFYING LETTERS: DPN = Data Processing Number; C = Course; L = Length of Course; CR = Credit.

DPN	C	L	CR
LANGUAGE ARTS			
010	Lang Arts 9	1	-1.0
020	Lang Arts	1	-1.0
FREE READING			
090	Free Read I	½	-.50
091	Free Read II	½	-.50
SOCIAL STUDIES			
AMERICAN CULTURES			
100	US Hist 9	1	1.0
101	Basic Ec	½	-.50
103	Minorities	¼	-.25
104	Soc Prob	¼	-.25
105	Local Hist	¼	-.25
106	Am at War	¼	-.25
107	Bus & Lab	¼	-.25
108	Am Since 45	¼	-.25
109	Am Today	¼	-.25
110	Am vs Am	¼	-.25
111	Hail Chief	¼	-.25
112	BBB Bust	¼	-.25
113	Taking 5th	¼	-.25
115	Law/Order	¼	-.25
116	S.S.Skills	¼	-.25
117	Gr Am Rip	¼	-.25
WORLD CULTURES			
120	Early Man	¼	-.25
121	Asian Cult	¼	-.25
122	ME Cult	¼	-.25
123	E Eur Cult	¼	-.25
124	M Eur Cult	¼	-.25
125	Com World	¼	-.25
126	Afr Cult	¼	-.25
127	Cur Wld Af	¼	-.25
MATHEMATICS			
201	Con Math	½	-.50
202	Appl Math	½	-.50
203	Frac/Deci	½	-.50
205	Tra Math I	¼	-.25
206	Tra Math II	¼	-.25
207	Auto/Ind	¼	-.25
208	Math as Lang	¼	-.25
209	Math Curr	¼	-.25
210	Hist Math	¼	-.25
211	Math Fin	¼	-.25
212	Math S/H	¼	-.25
213	F-W-S	¼	-.25
220	Intro Alg	½	-.50
221	Alg I	½	-.50
222	Alg II	½	-.50
223	Alg III	½	-.50
224	Alg IV	½	-.50
225	Coll Alg	½	-.50
226	Trigonomet	½	-.50
227	Linear Alg	¼	-.25
228	Abstr Alg	¼	-.25
230	Geom I	½	-.50
231	Geom II	½	-.50
232	Coord Geom	¼	-.25
233	Trans Geom	¼	-.25
234	Syn Geom	¼	-.25
235	Solid Geom	¼	-.25
240	Prob	¼	-.25
241	Statistics	¼	-.25
242	Intro Cal	¼	-.25
243	Calculus	¼	-.25
244	Diff Funct	¼	-.25
245	Intro Log	¼	-.25
250	Comp Prog	½	-.50
SCIENCE			
301	Mar Bio	¼	-.25
302	An w/o Bkbn	¼	-.25
303	Lif Bef Bth	¼	-.25
304	Agr Ecosys	¼	-.25
305	Funct Life	¼	-.25
306	Rad Bio	¼	-.25
307	Orig of Spcs	¼	-.25
308	Wld of Micr	¼	-.25
309	Beh Lvg Tg	¼	-.25
310	Rel Vert Env	¼	-.25
311	Wld Vasc Plt	¼	-.25
313	Survival	¼	-.25
314	Soc Imp Bi	¼	-.25
328	Invert	¼	-.25
329	Man and Ag	¼	-.25
330	Plan Ast	¼	-.25
331	Prin Geo	¼	-.25
332	Meteor	¼	-.25
335	Stel Ast	¼	-.25

DPN	C	L	CR
336	Climate	¼	-.25
350	Prin Chem	½	-.50
351	Prin Chem II	½	-.50
352	Chem Study	1	-1.0
353	Qual Anal	¼	-.25
356	Nucl Chem	¼	-.25
357	Cons Chem	¼	-.25
358	Organ Chem	¼	-.25
375	Automobile	¼	-.25
376	Magic Flit	¼	-.25
379	Prin of Mot	½	-.50
385	Kinematics	¼	-.25
386	Dynamics	¼	-.25
387	Light	¼	-.25
388	Lectromag	¼	-.25
395	Metrica	¼	-.25

BUSINESS EDUCATION

400	Intro Bus	½	-.50
405	Short I	½	-.50
406	Short II	½	-.50
407	Short III	½	-.50
408	Short IV	½	-.50
409	ABC Short	½	-.50
415	Pers Typ	½	-.50
416	Typ I	½	-.50
417	Typ II	½	-.50
418	Typ III	½	-.50
419	Typ IV	½	-.50
425	Acctg I	½	-.50
426	Acctg II	½	-.50
427	Acctg III	½	-.50
428	Acctg IV	½	-.50
429	Sm Bus Acct	½	-.50
435	Bus Math I	½	-.50
436	Bus Math II	½	-.50
437	Con Law	½	-.50
438	Off Mach - RC	½	-.50
445	COP I	½	-.50
446	COP II	½	-.50
447	Sec Tech I	½	-.50
448	Sec Tech II	½	-.50

MODERN FOREIGN LANGUAGE

500	Fr I	½	-.50
501	Fr II	½	-.50
502	Fr III	½	-.50
503	Fr IV	½	-.50
504	Adv Fr	1	-1.0
505	Fr 4 Trav	¼	-.25

DPN	C	L	CR
520	Ger I	½	-.50
521	Ger II	½	-.50
522	Ger III	½	-.50
523	Ger IV	½	-.50
524	Adv Ger	1	-1.0
540	Sp Con I	¼	-.25
541	Sp Con II	¼	-.25

MFL CULTURES

560	Fr. Cult I	¼	-.25
561	Fr Cult II	¼	-.25
562	Fr. Lit	¼	-.25
563	Ger Cult	½	-.50
564	Russ Cu/Ph	¼	-.25

FINE AND PRACT ARTS

601	Oil Paint	¼	-.25
602	Water Color	¼	-.25
603	Elem Draw	¼	-.25
604	Draw Media	¼	-.25
606	Screen Pr	¼	-.25
608	Clay Pots	¼	-.25
612	Advert Art	¼	-.25
614	Calligraph	¼	-.25
615	Illustrate	¼	-.25

MUSIC

620	Band	1	-.40
621	Spec Chor	1	-.20
622	Reg Chor	1	-.20
623	Music I	½	-.50
624	Music II	½	-.50
625	Music III	½	-.50
626	Rock Music	½	-.50
627	Dance Band	½	-.50
628	Brass En	¼	-.25
629	Percuss En	¼	-.25
630	Wood W En	¼	-.25
631	Ch Tech I	¼	-.25
632	Ch Tech II	¼	-.25
635	Mus Lesson		-.00

HOME ECONOMICS

643	Bas Foods	¼	-.50
644	Baking	¼	-.50
646	Gour Club	¼	-.25
648	Beg Sewing	¼	-.50
649	Int Sewing	¼	-.50
650	Adv Sewing	¼	-.50
651	Tailoring	¼	-.50
652	Single Sur	¼	-.25
653	Home Sew	¼	-.25
654	Home Dec	¼	-.25
655	Crocheting	¼	-.25
656	Knitting	¼	-.25
657	Embroidery	¼	-.25

DPN	C	L	CR
660	Child Care	¼	-.25
661	Shopping	¼	-.25
662	About You	¼	-.25
665	Home Ec 9	1	-.40

INDUSTRIAL ARTS

670	Wd-Pl I	½	-1.0
671	Wd-Pl II	½	-1.0
672	Wd Pl III	½	-1.0
673	PM-MTL I	½	-1.0
674	PM-MTL II	½	-1.0
675	PM-MTL III	½	-1.0
676	MTL Mini	¼	-.25
677	Sm Gas Eng	¼	-.25
680	Photo I	½	-.50
681	Photo II	½	-.50
683	Silkscr I	½	-.50
684	Silkscr II	½	-.50
686	Offset I	½	-.50
687	Offset II	½	-.50
689	IA 9	1	-.40

ARTS & HUMANITIES

690	Newspaper	¼-1	-.25-1
691	Comms	½	-.50
692	Arts-Hu MS	½	-.50
693	Gen Psych	¼	-.25
694	Trans Anal	¼	-.25

PHYSICAL EDUCATION

700	Phy Educ	1	-.25
702	Health	½ -1	,.3 -.6
703	An/Phy	1	-1.0
704	Stu Train	¼	-.25

DRIVER EDUCATION

800	Dr Ed	½	-.20

Total Credits

Parent's Signature

Return to Homeroom Teacher
(Date)

FOR DATA PROCESSING USE ONLY

STUDENT NO. NAME SEX HR SCHED GRADE PHONE

SCHOOL SCHOOL YEAR PAGE OF

MISCELLANEOUS PRIORITY

ONLY ACCEPTABLE MARK

SCHEDULING COURSE SELECTIONS

INSTRUCTIONS:
1. USE ONLY A NO. 2 PENCIL.
2. ERASE COMPLETELY WHEN MAKING CORRECTIONS.

COURSE CODE	COURSE NAME	COURSE CODE	COURSE NAME	COURSE CODE	COURSE NAME	COURSE CODE	COURSE NAME
020	Lang Arts	425	Acctg I	660	Child Care		
101	Basic Econ	435	Bus Math I				
106	Am at War			672	Wd-Pl III		
110	Am vs Am	447	Sec Tech I	674	Pm-Mtl II		
120	Early Man						
126	Afr Cult			681	Photo II		
201	Con Math			686	Offset I		
202	App Math	500	Fr I				
205	Tra Math I						
206	Tra Math II	502	Fr III	700	Phy Ed		
220	Int Alg						
221	Alg I						
222	Alg II	520	Gr I	800	Dr Ed		
223	Alg III	522	Gr III				
242	Intro Cal						
243	Calculus						
244	Diff Funct	540	Sp Con I				
301	Mar Bio						
303	Lif Bef Bth						
309	Beh Lvg Tg	601	Oil Paint				
310	Rel Vet En						
350	Prin Chem	614	Calligraphy				
351	Prin Chem II						
352	Chem Study	622	Reg Chor				
385	Kinematics						
386	Dynamics						
387	Light	628	Brass Ens				
400	Intro Bus						
405	Short I	643	Bas Foods				
416	Typ I						

NCS Trans-Optic F-3113-5432

STUDENT COURSE REQUESTS

7700050 — Student Number
JANE DOE — Student Name
09/30/59 — DOB

COURSE CODES

020	LANG ARTS	101	BASIC EC	303	LIF BF BTH
305	FUNCT LIFE	307	ORIG SPCS	314	SOC IMP BI
405	SHORT I	406	SHORT II	417	TYPE II
429	SM BUS ACC	504	ADV FR	540	SP CON I
541	SP CON II	564	RUSS CU/PH	680	PHOTO I
700	PHY EDUC				

STUDENT COURSE REQUESTS

7705950 — Student Number
JOHN DOE — Student Name
10/17/59 — DOB

COURSE CODES

020	LANG ARTS	101	BASIC EC	127	CUR WLD AF
225	COLL ALG	226	TRIGONOMET	418	TYPE III
419	TYPE IV	425	ACCTG I	426	ACCTG II
621	SPEC CHOR	622	REG CHOR	652	SINGLE SUR
700	PHY EDUC				

Sample 5

COURSE NAME	COURSE CODE	SEC	SEM	PER	DAYS MET	PER	DAYS MET	PER	DAYS MET	PER	DAYS MET
ADV FR	504	03	3	05	MTWRF	06	MTWRF				

STUDENT SIGNATURE

COURSE REGISTRATION CARD

SEMESTER CODES

1 - 1ST NINE WEEKS
2 - 2ND NINE WEEKS
3 - 3RD NINE WEEKS
4 - 4TH NINE WEEKS
F - FALL SEMESTER
S - SPRING SEMESTER
A - ALL YEAR

AAI 41497

Sample 6

STUDENT NUMBER	NAME	BIRTHDATE
02 01 09	1 2 1 15 21 23 02 30 34	17 4 18 43 56 52 68 37 00 80 0

REQUESTED COURSES

STUDENT COURSE REQUEST CARD

AAI 41498

Sample 7

TAMAQUA AREA HIGH SCHOOL MASTER SCHEDULE

CODE	SECT	TITLE	TEACHER	QUARTER	PERIOD	DAY
020	1	Language Arts	LA Teachers teach as a	1-2-3-4	2	Daily
	2		TEAM. Electives will be	1-2-3-4	3	Daily
	3		selected every 4 weeks.	1-2-3-4	4	Daily
	4			1-2-3-4	7-8	Daily
	5			1-2-3-4	9	Daily
	6			1-2-3-4	10	Daily
101	1	Basic Econ	Mr. Jones	F	1	Daily
	2		Mr. Jones	F	2	Daily
	3		Mr. Jones	F	5-6	Daily
	4		Mr. Jones	F	10	Daily
	5		Mr. Jones	S	4	Daily
	6		Mr. Jones	S	5-6	Daily
	7		Mr. Jones	S	10	Daily
	8		Mr. Zlock	S	3	Daily
	9		Mr. Zlock	S	9	Daily
106	1	Am at War	Mr. Ackerman	1	1	Daily
	2		Mr. Ackerman	1	9	Daily
	3		Mr. Ackerman	2	3	Daily
	4		Mr. Ackerman	1	5-6	Daily
	5		Mr. Ackerman	3	4	Daily
	6		Mr. Ackerman	3	5-6	Daily
110	1	Am vs Am	Mr. Houm	2	9	Daily
	2		Mr. Riccetti	4	4	Daily
120	1	Early Man	Mr. James	1	2	Daily
	2		Mr. James	1	7-8	Daily
	3		Mr. James	2	9	Daily
	4		Mr. James	2	3	Daily
	5		Mr. James	1	4	Daily
	6		Mr. James	3	2	Daily
	7		Mr. James	3	3	Daily
	8		Mr. James	4	7-8	Daily
	9		Mr. James	4	9	Daily
126	1	Afr. Cult	Mr. Zlock	1	9	Daily
	2		Mr. Zlock	2	3	Daily
	3		Mr. Zlock	1	10	Daily
	4		Mr. Zlock	3	1	Daily
	5		Mr. Zlock	3	10	Daily
	6		Mr. Zlock	2	9	Daily

MASTER SCHEDULE, -2-

CODE	SECT	TITLE	TEACHER	QUARTER	PERIOD	DAY
201	1	Con Math	Mr. Harvan	F	1	Daily
	2		Mr. Harvan	F	3	Daily
	3		Mr. Harvan	F	5-6	Daily
	4		Mr. Harvan	F	9	Daily
202	1	App Math	Mr. Harvan	S	1	Daily
	2		Mr. Harvan	S	3	Daily
	3		Mr. Harvan	S	9	Daily
205	1	Tra Math I	Mr. Trubilla	1	4	Daily
	2		Mr. Trubilla	3	5-6	Daily
	3		Mr. Hollenbach	1	10	Daily
	4		Mr. Hollenbach	3	2	Daily
206	1	Tra Math II	Mr. Trubilla	2	4	Daily
			Mr. Trubilla	4	5-6	Daily
			Mr. Hollenbach	2	10	Daily
			Mr. Hollenbach	4	2	Daily
220	1	Int Alg	Mrs. Lusch	F	3	Daily
			Mrs. Lusch	F	7-8	Daily
221	1	Alg I	Mrs. Lusch	F	1	Daily
	2		Mrs. Lusch	F	4	Daily
	3		Mrs. Lusch	F	9	Daily
	4		Mrs. Lusch	S	3	Daily
	5		Mrs. Lusch	S	7-8	Daily
222	1	Alg II	Mr. Trubilla	F	2	Daily
	2		Mr. Trubilla	F	10	Daily
223	1	Alg III	Mr. Trubilla	S	2	Daily
			Mr. Trubilla	S	10	Daily
242	1	Intro Cal	Mr. Trubilla	1	5-6	Daily
243	1	Calculus	Mr. Trubilla	2	5-6	Daily
244	1	Diff Funct	Mr. Harvan	3	5-6	Daily

TAHS MASTER SCHEDULE -3-

CODE	SECT	TITLE	TEACHER	QUARTER	PERIOD	DAY
301	1	Mar Bio	Mr. Fincham	1	2	Daily
	2		Mr. Fincham	1	4	Daily
	3		Mr. Fincham	1	5-6	Daily
	4		Mr. Fincham	3	3	Daily
	5		Mr. Fincham	3	9	Daily
	6		Mr. Fincham	3	10	Daily
303	1	Lif Bef Bth	Mr. Hock	1	3	Daily
	2		Mr. Hock	1	4	Daily
	3		Mr. Hock	1	7-8	Daily
	4		Mr. Hock		2	Daily
	5		Mr. Hock	2	3	Daily
	6		Mr. Hock	2	4	Daily
	7		Mr. Hock	3	5-6	Daily
	8		Mr. Hock	3	9	Daily
	9		Mr. Hock	3	10	Daily
	10		Mr. Hock	4	1	Daily
	11		Mr. Hock	4	2	Daily
309	1	Beh Lvg Tg	Mr. Edwards	1	4	Daily
	2		Mr. Edwards	1	7-8	Daily
	3		Mr. Edwards	1	9	Daily
	4		Mr. Edwards	3	1	Daily
	5		Mr. Edwards	3	2	Daily
	6		Mr. Edwards	3	3	Daily
	7		Mr. Edwards	3	10	Daily
	8		Mr. Edwards	4	1	Daily
	9		Mr. Edwards	4	7-8	Daily
310	1	Rel Vet En	Mr. Lankalis	1	1	Daily
	2		Mr. Lankalis	1	9	Daily
	3		Mr. Lankalis	1	10	Daily
	4		Mr. Lankalis	2	2	Daily
	5		Mr. Lankalis	2	3	Daily
	6		Mr. Lankalis	2	4	Daily
	7		Mr. Lankalis	3	4	Daily
350	1	Prin Chem	Mr. Willing	F	2	Daily
				(F-Lab)	3	MW
	2		Mr. Willing	F	4	Daily
				(F-Lab)	3	TR
	3		Mr. Willing	F	10	Daily
				(F-Lab)	9	TR
351	1	Prin Chem II	Mr. Willing	S	10	Daily
				(F-Lab)	9	TR

MASTER SCHEDULE -4-

CODE	SECT	TITLE	TEACHER	QUARTER	PERIOD	DAY
352	1	Chem Study	Mr. Willing	A	7-8	Daily
				A(Lab)	9	MW
385	1	Kinematics	Mr. Tombasco	1	2	Daily
				1(Lab)	3	MW
	2		Mr. Tombasco	1	4	Daily
				1(Lab)	3	TR
386	1	Dynamics	Mr. Tombasco	4	2	Daily
				4(Lab)	3	MW
	2		Mr. Tombasco	4	4	Daily
				4(Lab)	3	TR
387	1	Light	Mr. Tombasco	2	2	Daily
				2(Lab)	3	MV
	2		Mr. Tombasco	2	4	Daily
				2(Lab)	3	TR
400	1	Intro Bus	Mr. Buy	F	4	Daily
	2		Mr. Buy	F	7-8	Daily
	3		Mr. Buy	S	4	Daily
	4		Mr. Buy	S	7-8	Daily
405	1	Short I	Mrs. Scheffey	F	2	Daily
	2		Mrs. Scheffey	F	3	Daily
416	1	Typ I	Mr. Blue	F	1	Daily
	2		Mr. Lapotsky	F	2	Daily
	3		Mr. Lapotsky	F	3	Daily
	4		Mr. Lapotsky	F	4	Daily
	5		Mr. Lapotsky	F	5-6	Daily
425	1	Acctg I	Mr. Blue	F	4	Daily
	2		Mr. Blue	F	10	Daily
435	1	Bus Math I	Mr. Setcavage	F	1	Daily
	2		Mr. Setcavage	F	5-6	Daily
	3		Mr. Setcavage	F	9	Daily
	4		Mr. Setcavage	S	9	Daily
447	1	Sec Tech I	Mrs. Butts	F	10	Daily

TAHS MASTER SCHEDULE -5-

CODE	SECT	TITLE	TEACHER	QUARTER	PERIOD	DAY
500	1	Fr I	Mrs. Pinkey	F	1	Daily
	2		Mrs. Pinkey	F	2	Daily
	3		Mrs. Setcavage	F	3	Daily
502	1	Fr III	Mrs. Setcavage	F	1	Daily
	2		Mrs. Setcavage	F	2	Daily
	3		Mrs. Setcavage	F	4	Daily
520	1	Gr I	Mr. Scheidler	F	1	Daily
	2		Mr. Scheidler	F	3	Daily
	3		Mr. Scheidler	F	4	Daily
	4		Mr. Scheidler	F	10	Daily
522	1	Gr III	Miss Britton	F	2	Daily
	2		Miss Britton	F	4	Daily
	3		Miss Britton	F	9	Daily
	4		Miss Britton	F	10	Daily
540	1	Sp Con I	Mrs. Pinkey	1	9	Daily
	2		Mrs. Pinkey	1	10	Daily
	3		Mrs. Pinkey	3	9	Daily
	4		Mrs. Pinkey	3	10	Daily
601	1	Oil Paint	Miss Gerhard	1	7-8	Daily
	2		Miss Gerhard	3	7-8	Daily
614	1	Calligraphy	Miss Gerhard	4	7-8	Daily
622	1	Reg Chor	Mr. Hunt	A	6	RF
	2		Mr. Hunt	A	7	RF
628	1	Brass Ens	Mr. Hunt	3	4	Daily
643	1	Bas Foods	Mrs. Yurchak	1	3-4	Daily
	2		Mrs. Yurchak	2	3-4	Daily
660	1	Child Care	Mrs. Boyer	1	10	Daily
	2		Mrs. Boyer	2	2	Daily
	3		Mrs. Boyer	2	10	Daily
	4		Mrs. Boyer	3	2	Daily
	5		Mrs. Boyer	4	9	Daily

TAHS MASTER SCHEDULE -6-

CODE	SECT	TITLE	TEACHER	QUARTER	PERIOD	DAY
672	1	Wd-Pl III	Mr. Koval	S	9-10	Daily
674	1	PM-Mtl II	Mr. Rohart	F	9-10	Daily
	2		Mr. Rohart	S	1-2	Daily
681	1	Photo II	Mr. Livingston	F	10	Daily
	2		Mr. Livingston	S	1	Daily
686	1	Offset I	Mr. Livingston	2	1	Daily
	2		Mr. Livingston	3	9	Daily
700	1	Phy Ed	Gym Instructors	1-2-3-4	1	MWF
	2		Gym Instructors	1-2-3-4	2	MWF
	3	Frosh	Gym Instructors	1-2-3-4	3	MWF
	4	&	Gym Instructors	1-2-3-4	4	MWF
	5	Soph	Gym Instructors	1-2-3-4	5-6	MWF
	6	Only	Gym Instructors	1-2-3-4	9	MWF
	7		Gym Instructors	1-2-3-4	10	MWF
800	1	Dr. Ed	Mr. Kellet	F	2	Daily
	2		Mr. Kellet	F	3	Daily
	3		Mr. Kellet	F	5-6	Daily
	4		Mr. Kellet	S	1	Daily
	5		Mr. Kellet	S	4	Daily
	6		Mr. Kellet	S	7-8	Daily
	7		Mr. Kellet	S	9	Daily
	8		Mr. Kellet	S	10	Daily

TAMAQUA AREA SENIOR HIGH SCHOOL

FINAL INDIVIDUALIZED REGISTRATION

Individualized scheduling is the basic responsibility of each student. Follow the directions and it will not be difficult, but it will require some of your time.

1. Check your registration materials. You should have:
   a. A list of your requested courses
   b. A copy of the master schedule
   c. A blank schedule sheet for preparing your own schedules

2. Using the above materials, you are ready to construct your schedule. Although two schedules are desired, students will be required to have at least one tentative schedule prepared in order to enter the arena.

3. Students will not be allowed to drop or add courses until the arena is completed. Requests for change must be in writing and attached to the card deck which is turned in at the check out table.

4. Students will be held accountable for scheduling those courses indicated on their course selection sheet. If you find this is impossible due to conflicts, the sheet must be initialed by the guidance counsellor in the arena.

5. A student, who during the year, has failed a total of 2 credits (8 quarter courses, 4 semester courses, 2 full year courses) or more, will be individually scheduled by the guidance counsellor after the arena is completed.

6. Students who are absent on days their scheduling is to be completed will be called for scheduling at the end of their grade level or at the end of the arena. If the arena is completed and the student is still absent, scheduling will be completed with the guidance counsellor.

PREPARING THE TENTATIVE SCHEDULE

1. To begin schedule building, you should identify for each course you have selected the different class hours and quarters when it is offered. You may find it helpful to list the courses and time slots on a separate sheet in order to avoid continued paging through the schedule.

2. All courses selected should be assigned to a quarter and period. To avoid confusion, use the blank schedules on the attached sheet. Two blanks are provided in order that you can develop an alternate schedule of the courses selected.

3. Check your electives, if you have any courses that:
   a. meet only one time for the year (ie. Advanced Modern Foreign Language, Intro to Calculus), or
   b. are double periods, such as Labs, Industrial Arts or Home Economics courses,

they must be scheduled first. For example, if you want Advanced German and it is offered only the 5th and 6th periods and during all 4 quarters, start with that course. You would enter it like this:

QUARTERS

	1	2	3	4
Per. 5	Adv. Gr ←			→
Per. 6	Adv. Gr ←			→

Period 5 and 6 are used for one class since they are two ½-hour lunch periods.

TAHS INDIVIDUALIZED REGISTRATION, '76-77

Example: If a double period in a quarter:

QUARTERS

	1	2	3	4
Per 3			Beg. Sewing	
Per 4			Beg. Sewing	

Example: a course offered only one time during the year and for one quarter only:

QUARTERS

	1	2	3	4
Per 2				Law/Order

4. After you have scheduled these type courses, next schedule your required courses Physical Education, Health, Math, Science, Social Studies, Language Arts. Always allow courses with the greatest frequency until last.

5. If your course does not meet every day you will need to indicate the day as well as the course. Example: Physical Education and Labs.

QUARTERS

	1	2	3	4
Per 10	P.E. T-R ←			→
Per 2	Prin. Chem ←	→		
Per 3	Lab M. W. ←	→	P.E. T-R ←	→

6. If you are eligible for Drivers Education Roadwork, or music lessons, you will schedule it on an independent basis with Mr. Kellet and Mr. Hunt during your study hall time.

7. The following charts provide the code information necessary to identify on the Master Schedule the quarter or quarters during which a course is offered and the days of the week it is offered.

CODE		QUARTERS	CODE		QUARTERS
1	=	1			
2	=	2	Fall	=	1-2
3	=	3	Spring	=	3-4
4	=	4	All Year	=	1-2-3-4

MONDAY	=	M
TUESDAY	=	T
WEDNESDAY	=	W
THURSDAY	=	R
FRIDAY	=	F

8. Remember to schedule LUNCH. Lunch periods this year will be scheduled on a quarter basis; therefore, you will pick up 4 cards for lunch.

TAMAQUA AREA HIGH SCHOOL

TENTATIVE PLAN FOR COURSES

QUARTERS

PERIODS:	1	2	3	4
1				
2				
3				
4				
5				
LUNCH				
6				
7				
8				
9				
10				

QUARTERS

PERIODS:	1	2	3	4
1				
2				
3				
4				
5				
LUNCH				
6				
7				
8				
9				
10				

REQUEST FOR SCHEDULE ADJUSTMENT

STUDENT NUMBER _____ NAME _____

	Course number and name	Reason for drop or add
DROP		
1.		
2.		
3.		
ADD		
1.		
2.		
3.		

Sample 10

MODULAR SCHEDULING

RATIONALE

Marian High school, a private school serving the Tamaqua Area decided to change from traditional scheduling to modular scheduling because of the many positive factors which we felt the modular approach could offer to education. Our decision was based on the fact that the modular system stresses the teacher's professional judgement and the student's responsibility for his learning; and, it was for these reasons, as well as the other factors noted below that we chose to go in this direction.

The departure from traditional scheduling gave us the opportunity to introduce more minor courses (not meeting 8 mods per week) such as Basic Art, Personal Typing, Newswriting, Journalism, Forensics and Adaptive Physical Education. The modular approach afforded us the opportunity to broaden the curriculum by initiating semester courses, which increased the number of electives in English, Social Studies and Mathematics and provided us with a more homogenous grouping of our students. Under this system we envisioned a better utilization of faculty strengths, team-teaching, large and small group instruction, block-of-time rostering, and a better opportunity for individualized instruction. Another goal of modular scheduling was to correlate disciplines such as English and Social Studies and Math and Science.

The total facilities of the building could be utilized better via modular scheduling since all classrooms would be in maximum use as resource centers, classrooms or study halls. This scheduling technique provided students with the opportunity for independent study since the modular approach afforded a greater flexibility for utilizing study hall time. Instead of being scheduled for study halls, students had greater freedom to use these mods to work on independent study projects in the area of their choice. We hoped that this freedom would afford the students a maturing experience in the positive use of their total school time. Student tutors could be utilized better under this system since independent study mods could be used to carry out this service. This arrangement would help to facilitate the establishment and development of remedial and enrichment programs and provide a diversity of activities during the school day.

We felt very strongly that the implementation of the modular scheduling system would make the student's use of school time more functional so the staff could provide a better education for each student. Too often students have found it difficult to work on their own when they reach college or enter a career. Thus, we hoped to help the student develop an individual responsibility to the matter at hand, to assist the student in developing an inquiring mind and to aid the student in acquiring skills of independent study.

METHODS OF EFFECTIVE CHANGE

Realizing such a major change in scheduling needed much preparation, a full year of orientation was introduced with workshops and lectures for the faculty. Professional reading as **A Guide to Better Schools**, by Trump and Baunham, **Flexibility Scheduled High School**, by Wiley and Bishop, and **A New Design for High School Education**, by Bush and Allen, were made available to the faculty. A series of films narrated by Dwight W. Allen were also presented which covered various aspects of modular scheduling, such as Independent Study, Large and Small Group Instruction, and Facility Planning. Teachers were afforded the opportunity to visit other schools which had already adopted Modular Scheduling and thus had the chance to see the program in actual use. Abington High School in Abington, Pennsylvania, and Lourdes Regional in Shamokin, Pennsylvania, were the two schools utilized for these visitations. Both schools had an excellent modular scheduling program; however, Lourdes Regional also offered a faculty and student population similar to our own. After these visitations, faculty discussions were instituted at which time the teachers could share their experiences and reactions to the various aspects of our orientation program. Other meetings were held to hammer out the first year's plan for implementing the Modular Scheduling program. Among the items considered were the length of each mod, which was set at twenty-five minutes, the number of mods per day, which was determined to be fourteen, and the span of the cycle which was established at five days.

It was decided that the student's unscheduled class time (normally study hall time) would be utilized for Independent Study Projects (IS Projects). Each student would be required to complete one IS Project in his field of interest during each semester, and would receive academic credit for the work done. Teachers in the various disciplines would provide the necessary guidance and check the progress of all students who chose to do projects under that particular teacher's supervision. At the end of each semester, seminars would be set up where outstanding IS Projects would be presented by the students to the remainder of the faculty and student body.

In the course of a regular 5 day cycle, some free mods would be set aside for the upper class students for study, recreation, or socializing. Freshmen were not given free mods because the general feeling of the faculty was they needed more supervision in order to develop better study habits. Free mods would be forfeited by upper class students because of academic failure or because conduct not warranting the retention of the privilege. Supervised Study was established for students who failed the previous quarter, and attendance was mandatory throughout the following quarter.

Under Modular Scheduling opportunities were provided for students to use free mods for service to the school. Such service would take the form of messengers, receptionists, student secretaries, cafeteria assistants, and student tutorial services. This orientation was valuable to most faculty members, and it set the proper mood for beginning this major shift in scheduling.

Evaluation of First Year

POSITIVE ASPECTS

During the first year of modular scheduling, we were able to accomplish many of the objectives that we had set for ourselves. We introduced a number of minor courses such as Forensics, Newswriting and Broadcast Journalism and broadened the curriculum with the addition of semester courses in the English, Social Studies and Mathematics departments and developed "mini-courses" in English, Social Studies, Religion and Home Economics. Homogenous grouping was achieved for the high and low ability groups, but the choice of a foreign language created an impasse for the middle ability groups, and, therefore they had to be grouped heterogeneously.

The initial IS Projects which were developed during the unscheduled time provided by Modular Scheduling were, for the most part, satisfactory according to the established research guidelines. Seminars given by students at the end of each semester were informative and interesting to the student body. The use of the library and research centers increased greatly throughout the year. Many of the more ambitious students contracted for extra independent work beyond their original IS Project. Some teachers were able to extend the scope of their courses as a result of the student needs evolving from the IS projects and the ideas developed in the projects.

Modular scheduling resulted in a much wider utilization of the building; classrooms were in constant use as resource centers, study halls, tutorial centers, regular classrooms and teacher planning rooms. Our building was eight years old when Modular Scheduling was instituted and we made the transition from traditional to Modular Scheduling without any major renovation.

A majority of our students were able to handle the responsibilities associated with modular scheduling as was evidenced by their ability to maintain satisfactory academic standards in an atmosphere of greater freedom. Our feeling is that as long as students receive recognition for their work in a self-directed endeavor, the majority will be able to function in a responsible manner, even though many of the restraints of the traditional setting have been removed.

Modular Scheduling made it possible to schedule every student for double mods in Physical Education which increased the actual "working" time in this area. We did accomplish some progress in the development of programs which were designed for individualized instruction, but we are of the opinion that there is still much room for growth in this area. We found this type of program well suited to providing remedial and enrichment time for some students. This became even more functional after individual schedules could be altered to meet these needs. The availability of blocks of open time for teachers and students proved most beneficial in this regard. This also applied in the case of small group instruction wherein the teacher could devote blocks of time to smaller numbers of students for more concentrated periods of instruction. In conclusion, we felt that the positive results of the program which we have just outlined, justified our decision to make the transition to Modular Scheduling. There are some phases of the program which need refinement, and there are other phases which might be eliminated completely in time. Generally, we are pleased with the results which we have achieved by initiating Modular Scheduling at Marian High School.

NEGATIVE ASPECTS

Even though we have concluded that the program, as a whole, was worthwhile, let us now take some time to point out those phases of the program which we felt needed refinement. Even though we felt that modular scheduling provided an excellent opportunity for team teaching to develop, we find that the teachers did not utilize team teaching to any extent. Teachers seemed more prone to work independently rather than pool their resources. Also, teachers did not take full advantage of the opportunity to develop small group instruction. It is hoped that the success of those teachers who did utilize small group instruction and team teaching will help to increase the involvement of more teachers. Many teachers, probably because of their years of traditional background, seemed to revert to teaching along strictly traditional lines, and as a result were restricted in their utilization of time.

Since we had made a large number of rooms available for IS time, some students wasted much of their time roaming from room to room during the IS mod. The lack of supervision in the IS areas increased the noise level and the petty vandalism. It was found that some students were unable to use their study time wisely which resulted in poor quality work and failing grades. It is probably too much to expect that everyone will adhere to the established standards, but we must continue to strive to achieve a sense of responsibility on the part of the students.

One of the scheduling problems that resulted was that student IS mods occurred frequently in large clusters rather than being spread out. The resulting large block of unscheduled time also helped to contribute to a greater wasting of time even on the part of many of the better students. It is not realistic to cluster a large block of unscheduled time and expect the students to work continuously within it. We believed that the freshmen needed more guidance in their use of study time, and it was decided that it would be better to restrict their movement and place them in supervised study, at least for the first semester. After the semester, those who showed the ability to work on their own would be granted IS mods, while the others would remain restricted for the remainder of the year.

Because of roster conflicts, teachers experienced difficulty in meeting with their students concerning their IS Projects. This created an impasse in the checking of progress and hampered the teacher's ability to guide the students through the projects. Because of the lack of periodic checking, some of the students were doing "last minute reports", which was evident in the quality of the finished products.

REVISIONS AFTER THE FIRST YEAR'S EVALUATION

In an effort to eliminate the "last minute" type of IS project, a series of planned meetings was set up to enable teachers to meet with the students whose IS projects they moderated. A progress report was required at these meetings and this helped the student budget his time and complete his IS project on schedule. Teachers were asked to stress greater student use of the library. This was not meant to be busy work, it was hoped that increased library research would eliminate some of the wasted time. Efforts were also made to prevent the scheduling of large clusters of unscheduled time.

It was decided that the freshman teachers would serve as a committee to determine which freshmen, who had been placed in supervised study for the first semester, were capable of handling IS time for the second semester. The committee's decision was based on academic proficiency and student responsibility.

In an effort to stress the student tutorial program, the National Honor Society was assigned this task with the idea that their service time could be utilized to assist failing or slow students. This was one area where the flexibility of time proved to be a real asset.

Because of the large amount of student movement which had been occurring during their IS mods, it was decided to assign teacher hall proctors whose function was to restrict unnecessary movement once the mod had begun. Corridor passes allowed a student to move from an assigned area to another area in the building so that he could complete all necessary IS work. Efforts were made to strengthen the resource centers by localizing each department's resources in a particular section of the building. It was felt that this would provide greater access to these materials with less student movement.

Some teachers requested more variation in the length of class periods . . . . one mod, two mods or three mods, and a change in the number of times a class would meet in a cycle . . . . three, four times per cycle, or perhaps everyday. These requests were based on the need for longer laboratory periods particularly in the sciences and literature; daily meetings such as in language and mathematics, and shorter mods for vocabulary testing, etc. Efforts were made to try to satisfy all requests.

Revision for 1976-77

Since the emphasis in IS projects has shifted from enrichment and research to busy work, it was decided to discontinue the IS program. Lack of teacher and student responsibility resulted in poor quality projects, the copying of previously done work, and a general indifference to the fundamental goals of the program. The discontinuation of the IS program will result in the elimination of many work areas for IS time. The establishment of one designated area for scheduled study time and the constant supervision of that area will simplify scheduling, hall movement, and proctoring assignments.

The faculty has requested that the schedule revert back to the double mod program rather than the variation of one, or three mods. The double mod program will help to eliminate some of the long stretches of unscheduled time. Several teachers have requested that their classes meet five times in the five day cycle, and this will be tried in the Language, Mathematics, and English disciplines where the teachers so desire.

A large multi-discipline resource center is planned to replace the individual centers which had been established and it is hoped that this will be completed within the 1976-77 term.

New library regulations will be developed to help the students to better utilize the facility and to have better access to the library as the need arises.

The National Honor Society will continue to work on ways to eliminate large groups in study halls.

During the year, a committee will study the pros and cons of six and seven day cycles to see if either of these will prove more advantageous than the 5 day cycle under which we are presently working.

Study will be given to the possibility of more large group instruction in some disciplines. It is felt that large group instruction could help vary the individual's class routine and better utilize the time and efforts of faculty members.

The faculty, as a whole, remains committed to Modular Scheduling, and even though our original plan has undergone revision, we still feel that this type of program offers us the best vehicle for meeting our goals and objectives.